



***** Baseline Scenario: On-Site Cell WBS Dictionary *****

**U.S. DEPARTMENT OF ENERGY
WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION**

| | | | |
|--|---|--|--|
| 1. PROJECT TITLE/PARTICIPANT Environmental Management/Bechtel Jacobs Company LLC | | 2. DATE 01/08/2004 | 3. IDENTIFICATION NUMBER DE-AC05-98OR22700 |
| 4. WBS ELEMENT CODE 1.12.05.04.04.01 | | 5. WBS ELEMENT TITLE Facility Removal/Remediation Waste Management | |
| 6. INDEX LINE NO. | 7. REVISION NO. AND AUTHORIZATION N/A | | 8. DATE N/A |
| 9. APPROVED CHANGES N/A | | | |
| 10. SYSTEM DESIGN DESCRIPTION | | | 11. BUDGET AND REPORTING NUMBER |
| 12. ELEMENT TASK DESCRIPTION 12. ELEMENT TASK DESCRIPTION INTRODUCTION The projected waste generation from deferred unit soil remediation is 1.0 million cubic yards (given that a decision document has not been signed for deferred units, this waste volume number is only approximate). In addition, 1.5 million cubic yards (CY) of facility removal debris waste is expected to be generated. Currently, the majority of remediation generated waste is being disposed of at the Envirocare of Utah. PORTS is in the process of obtaining certification to also utilize Nevada Test Site (NTS). The purpose of this subproject is to provide cost effective and responsible method of disposing of facility removal and remediation generated waste. The preliminary assessment indicate that the on-site disposal is approximately 1/4 the cost of off-site disposal, which has the potential to save approximately \$1 billion. At other DOE sites (Oak Ridge, Fernald, and Weldon Spring), that have similar site conditions, the construction of an onsite disposal facility was the preferred option. Therefore, the scope of this subproject is the assessment, design, liner/support facilities construction, waste placement, and capping of an on-site Portsmouth Waste Management Facility (PWMF). This subproject also includes operations of an enclosed on-site RCRA permitted storage facility, assumed to be XT-847. The end state of this subproject for PWMF will be a completed waste storage facility, which after completion of facility removal and soil remediation activities. The completed PWMF will be turned over to Long-term Stewardship for monitoring and cap maintenance. The end state of the RCRA permitted storage facility will be the removal of all EM waste. It is assumed that the RCRA permitted storage facility would remain to support future site operations. LOGIC RELATIONSHIPS This subproject contains intra-subproject ties between activities and ties with the facility removal, D&D and the deferred unit soil remediation subprojects. The intra-subproject ties are associated with assessment activities, design and liner/support facilities construction, waste placement, and capping. The inter-subproject ties are as follows: - 05.04.03.03 - GCEP Cleanout - RCRA Permit modifications required for operation of XT-847. - 05.04.02.01 - Quad I Deferred Units - waste generation/disposition requires PWMF to be operational. - 05.04.02.02 - Quad II Deferred Units - waste generation/disposition requires PWMF to be operational. - 05.04.02.03 - Quad III Deferred Units - waste generation/disposition requires PWMF to be operational. - 05.04.02.04 - Quad IV Deferred Units - waste generation/disposition requires PWMF to be operational. - 05.04.03.04 - Sitewide D&D - waste generation/disposition requires PWMF to be operational. - Long Term Stewardship - Will perform surveillance and monitoring after the final closure of PWMF SCOPE DESCRIPTION Release Sites and Facilities Assessments - Ports Waste Management Facility (PWMF) | | | |



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| 10. SYSTEM DESIGN DESCRIPTION | | | 11. BUDGET AND REPORTING NUMBER |
| 12. ELEMENT TASK DESCRIPTION (Continued) PRIOR and FUTURE ACCOMPLISHMENTS Past Accomplishments: - Completed a DOE review draft Preliminary Assessment for a Potential On-Site Waste Disposal Facility (performed under the D&D Planning subproject). Planned Accomplishments: - Finalize the Preliminary Assessment - Obtain Stakeholder agreement on future on-site Waste Disposal Facility - Perform characterization/siting study - Issue PWMF RI/FS for Stakeholder Review - PWMF RI/FS Complete - Issue PWMF Public Notice - Issue PWMF ROD for Stakeholder Review - PWMF ROD Approved - Award PWMF Design/Construction Subcontract - Start PWMF Phase I Construction Complete - Start PWMF Waste Placement Phase PERFORMANCE METRICS FY03 - Finalize the Preliminary Assessment - Perform characterization/siting study - Initial discussions with stakeholders/regulators on an On-Site Disposal Facility - Complete, with stakeholders concurrence, site(s) selection - Complete, with stakeholders concurrence, site characterization plan Out Years - Start assessment Phase - Complete RI/FS - Complete ROD - Award Design/Build subcontract - Complete Design (or Start Phase I Construction) - Complete Phase I Construction - Initiate Waste Placement - Complete Phase I Cap SCOPE The scope of this subproject consist of the following: - Project Management & Support | | | |



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| 10. SYSTEM DESIGN DESCRIPTION | | | 11. BUDGET AND REPORTING NUMBER |
| 12. ELEMENT TASK DESCRIPTION (Continued) - PWMF Waste Placement - Operations XT-847 Project Management & Support (WBS 05.04.04.01.01): Project Management & Support includes subcontract award/management, planning, baseline development/management, cost/schedule performance, progress reporting, technical coordination, records management, P/QA oversight, safety oversight, functional group coordination, client/regulatory interface, document review, and response to what-if request. PWMF Remedial Investigation/Feasibility Study (WBS 05.04.04.01.02): A scening siting study, waste generation volume/type assessment, preliminary waste acceptance criteria development, and conceptual design will be performed. A Data Quality Objectives (DQO) workshop will be held with the stakeholders. Existing data will be presented and discussed in the workshop and DQOs and additional data needs identified. Based upon the results of the workshop a focused work plan will be prepared to collect only the additional data required to support a site selection and the Feasibility Study (FS). A risk assessment will be performed to evaluate the risk associated with on-site and off-site disposal of facility removal/remediation generated waste. A FS will be prepared in conjunction with the Remedial Investigation (RI) and risk assessment that only evaluates alternatives for on-site and off-site disposal of facility removal/remediation generated waste. NEPA values will be incorporated in the RI/FS. Stakeholders will be active participants in the process. BJC is tasked with preparing for, participating in, and providing facilitation support for Stakeholder meetings. PWMF Proposed Plan/Record of Decision (WBS 05.04.04.02.03): Following concurrence on the RI/FS, a Proposed Plan will be prepared and issued for public comment. The Proposed Plan will highlight key aspects of the RI/FS, provide a brief analysis of alternatives and identify the preferred alternative. A public meeting will be held to assess the community's acceptance of the preferred alternative. The ROD will summarize the site conditions, the alternatives considered and a comparative analysis of the alternatives. The ROD will present the selected alternative, provide the rationale for the selection and specify how the alternative satisfies the requirements of section 121 of CERCLA as amended by Superfund Amendments and Reauthorization Act (SARA), and provide a responsiveness summary. The ROD will include the waste acceptance criteria for PWMF. Stakeholders will be active participants in the process. PWMF Design/Performance Specifications (WBS 05.04.04.01.04): This element includes finalization of the design and Remedial Design Work Plan/Remedial Action Work Plan (RDWP/RAWP). Comments will be incorporated into the 60% design, 90% design packages (RDWP/RAWP) and they will be issued to the stakeholders for their review. The RDWP/RAWP will provide a detailed description of the PWMF liner/support facilities construction and waste placement activities, the schedule, required plans, and the confirmatory sampling and verification activities that will be performed to demonstrate that the construction goals have been attained. PWMF Liner/Cap/Support Facilities (WBS 05.04.04.01.05): The proposed on-site disposal facility would be an aboveground structure with multiple internal berms (or sections). The disposal facility would be constructed with a clay base (barrier) and flexible membrane liner that would meet performance requirements to isolate wastes from the environment. The disposal cell would have a double leachate collection and detection system. The leachate system would remove liquids from the bottom of the cell for treatment. The cell would be covered with a state-of-the-art engineered, multi-layered cover (cap) that is capable of being maintained. The cap would be erosion resistant and prevent water infiltration into the cell. The can would also have a biotic layer as a deterrent for human, plant and animal intrusion. | | | |



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| 10. SYSTEM DESIGN DESCRIPTION | | | 11. BUDGET AND REPORTING NUMBER |
| 12. ELEMENT TASK DESCRIPTION (Continued) Soil required for the cell would be obtained from both on-site and off-site sources. Suitable quantities of soils and construction materials are readily available from off-site resources. Appropriate engineering controls and construction practices will be used to minimize the potential for adverse affects. Dust emission controls, leachate removal and treatment, storm-water runoff and sediment controls, and access restrictions would ensure protection for workers, the public, and the environment. At the completion of waste placement operations, the cell will be closed per all regulatory requirements, as required. During development of the support facilities for the on-site disposal cell, groundwater and air monitoring equipment will be installed to establish baseline environmental conditions. Baseline monitoring data would be used to develop an initial baseline for comparison with post-operational monitoring results. Construction of the facility is proposed to be broken into three phases, which should support the EM cleanout mission, while minimizing interim surveillance and maintenance and minimize risk of over capacity due to potential changes in site clean-out strategies: - Phase I = 1,600,000 CY. - Phase II = 1,700,000 CY - Phase III = 1,700,000 CY (total 5,000,000 CY) The liner construction, for Phases II & III will be performed simultaneously with waste placement operation. Capping activities will be performed, for each phase, at the completion of the waste placement activities associated with that phase. PWMF Completion Report Final report activities include preparing three Completion Reports, one after each construction phase. The completion report will summarize the actual construction activities documenting any unexpected occurrences or alterations made from the RDWP. The completion report will also document any analytical results obtained during construction activities. In addition, the completion report will provide information and recommendations to satisfy the 5-year CERCLA monitoring and review requirements. The completion report will be issued to DOE and the stakeholders for review and comment. PWMF Waste Placement(WBS 05.04.04.02.10): Provide the daily waste placement, environmental monitoring, radiological support, and roads & grounds maintenance for the PWMF. Conduct daily waste placement operations at the PWMF, which include: - Receipt of the waste material at the site. - Manage materials in staging areas, including waste, and soil cover/void-filling material. - Verification of the source of the material and its compliance with site disposal requirements. - Placement of the verified material within the cell and either compacting or reducing void space. - Preparation of disposal records. - Surveying the waste containers and trucks for external waste contamination prior to their release from the site. | | | |



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| 12. ELEMENT TASK DESCRIPTION (Continued) Operations XT-847 (WBS 05.04.04.02.20) - Post FY 2006 Conduct daily operations, which include: <ul style="list-style-type: none">- Accept waste for storage into RCRA permitted storage facilities.- Perform inspections and maintenance of building equipment (roof, cranes, roll-up doors, pumps, floor coatings, dikes, etc), vehicles, and mobile equipment,- Provides material controls and store room housekeeping,- Over pack or repackaged damaged or leaking containers, performs decontamination activities as required,- Non-destructive analysis of waste and staging of containers being returned,- Provide operational support for treatment and disposal projects as required.- Perform weekly facility compliance inspections. SAFETY AND HEALTH WORK PERFORMANCE It is the core value of Bechtel Jacobs Company that the safety and health of every worker and the public at large, and our environment, are the most important assets we are entrusted to protect. To accomplish this, an Integrated Safety Management System (ISMS), based on DOE's ISMS has been implemented that incorporates the five core functions and is based on the seven guiding principles. The objective of ISMS is to systematically integrate safety and environmental protection into the planning and execution of all work activities. The term safety encompasses Nuclear Safety, Industrial Safety, Industrial Hygiene, Occupational Health, Health Physics, and environmental protection. ISMS requirements flow-down to Bechtel Jacobs Company subcontractors. The Five Core Functions are: (1) Define the scope of work, (2) Analyze hazards, (3) Develop and implement hazard controls, (4) Perform work within controls, and (5) Provide feedback and continuous improvement. The Seven Guiding Principles are (1) Line Management Responsibility for Safety, (2) Clear Roles and Responsibilities, (3) Competence commensurate with responsibility, (4) Balanced Priorities, (5) Identification of Safety Standards and Requirements, (6) Hazard Control Tailored to Work Being Performed, and (7) Operations Authorization. Safety first is the M&I Contractor core value and is fundamental to every work activity. All accidents are preventable and the contractor strives to achieve "Zero Accident" performance on all jobs. Safety is everyone's responsibility this includes worksite safety, safety of fellow workers, personal safety, public safety, and protection of the environment. | | | |



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| 12. ELEMENT TASK DESCRIPTION (Continued) REQUIREMENTS/DRIVERS Bechtel Jacobs Company LLC Contract DE-AC05-98OR22700, December 18, 1997 Integrated Safety Management System Description, BJC/OR-87, Revision 2, September 1999 Integrated Safety Management System Description, BJC-GM-1400, Revision 2, October 2001 and Integrated Safety Management System Supplement, BJC-GM-1401, Revision 0, December 2000 As applicable, indicate other regulatory-related requirements. CERCLA: Y RCRA: Y DNFSB: N DOE Orders: Y AEA: N UMTRCA: N State: Y Other: N | | | |